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Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid CMB control number. Please type a plus sign (+) inside this box 🗢 Complete if Known Substitute for form 1449A/PTO Application Number 10/035,783 INFORMATION DISCLOSURE 12/24/2001 Filing Date STATEMENT BY APPLICANT First Named Inventor GRAUPE **Group Art Unit** 1626 (use as many sheets as necessary) Examiner Name Shaio **Attorney Docket Number** USAV2001/0081 - US - NP

			U.S. PATENT DOCUMENTS											
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72		4,927,809		STUBER, et al.	05-22-1990									
7		5,424,325		ANDO, et al.	06-19-1995									
$\neg \uparrow \neg$		5,486,623		ZIMMERMAN, et al.	01-23-1996									
		5,498,616		MALLANO, et al .	03-12-1996									
		5,847,135		BEMIS, et al.	12-08-1998									
		5,852,007		CHATTERJEE, et al.	12-22-1998									
		5,874,424		BATCHELOR, et al.	02-23-1999									
		5,998,390		RAMAMURTHY, et al.	12-07-1999									
7		6,004,939		SPRUCE, et al.	12-21-1999									
		6,022,861		SCARBOROUGH, et al.	02-08-2000									
		6,114,310		CHAMBERLAND, et al.	09-05-2000									
		6,124,333		MILLER, et al.	12-25-2000									
$\top$		6,255,453		GYORKOS	07-03-2001									
		6,353,017		ALTMAN, et al.	03-05-2002									
		6,455,502		BRYANT, et al.	09-24-2002									
		6,476,026		BRYANT, et al.	11-05-2002									
		6,492,362		GRAUPE, et al.	12-10-2002									
		6,506,733		BUYSSE	01-14-2009									
1//		6,576,630		LINK, et al.	08-10-2003									
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TD	7		EP .	EP 0272671		KRANTZ, et al.	08-29-1988		
11	T		EP	EP 0291234		EDWARDS, et al.	11-17-1998		
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7	Т		EΡ	EP 0652009		DOVEY, et al.	10-05-1995		T
	T		EΡ	EP 0754454		KOBAYASHI, et al.	01-22-1997		
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77	4		JP	JP/12009133		IRIKURA, et al.	05-06-1967		T

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7	71		10/035,783		GRAUPE, et al.	12-24-2001				
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7	L		U\$02/17922		GRAUPE, et al.	11-24-2003				
			10/787,967		GRAUPE, et al.	9-16-2002				
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7	T		wo	WO 00/69855		QUIBELL, et al.	11-23-2000		Τ
7	Τ		wo	WO 01/09110		BEKKALI, et al.	02-08-2001		T
7	Т		wo	WO 01/19796		GRAUPE, et al.	09-22-2001		$\mathbf{L}$
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70/		wo	WO 01/19816		EMMANUEL, et al.	03-22-2001		
7		wo	WO 01/30772		TUCKER, et al.	05-03-2001		
		wo	WO 01/55125		BOZSING, et al.	08-02-2001		
		wo	WO 01/58886		MISSBACH, M	08-16-2001		
		WO	WO 95/13089		MORRIELLO, et al.	05-18-1995		
		wo	WO 95/15309		JENKINS, et al.	06-08-1995		
		wo	WO 95/24382		HALLINAN, et al.	09-14-1995		
		wo	WO 96/21656		PEET, et al.	07-18-1998		
71		wo	WO 98/30353		PALMER, et al	10-03-1998		
7/7		WO	WO 96/40647		ZIMMERMAN, et al.	12-19-1998		

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II		wo	WO 96/40744		MARLOWE, et al.	12-19-1996		
VY		wo	WO 96/41638		DOLLE, et al.	12-27-1998		
		wo	WO 97/03679		MALLANO, 61 al.	02-06-1997		1
		WO	WO 98/01133		AIBE, et al.	01-15-1998		1
		WO.	WO 98/01428		DOMINGUEZ, et al.	01-15-1998		Т
		WO	WO 98/05336		MARQUIS, et al.	02-12-1988		1
		WO	WO 98/08802		YAMASHITA, et al.	03-05-1998		$\top$
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Committee Citie Item (horse managing forlitted started symposium nations at 2 data managing wolkerne legita minibade)			OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS	
Medicinal Chemistry Letters, 8: 333-338 (1986).  ASHWORTH, et al., 4-Cyanothiaxolidides as very potent, etable inhibitors of dipeptidyl peptidase IV, Bioorganic & Med. Chem. Letters, B.Oxford, 6(22):2745-2748 (1996).  BERGEMAN, et al., Studies on the reactivity of .alphaoyano.alpha-leccyano alkanoates. Versitile synthons for the essembly of imidazolea, Helv. Chim. ACTA, 82(6):909-918 (1999).  BILLSON, et al., The Design and Synthesis of Inhibitors of the Cystelryl , Bloorg, Med. Chem. Lett. vol. 6, pp. 993-998, 1998  BROMME, et al., Potent Inactivation of Cathepeins S and L., Biol. Chem. Hoppe—Seyler. vol. 375, No. 5, pp. 343-347, 1994.  CHATTERJEE, et al., D-Amino Acid Containing, High-Affinity Inhibitors of Recombinant Human Calpain I, Journal of Medicinal Chemistry, vol. 41, No. 15, pt. 2883-2866 (1999).  COHEN, et al., Therapy of relapsing multiple scienceis. Treatment approaches for nonresponders, Journal of Neuroimmunology, 98: 29-36 (1999).  DUFOUR, et al., Engineering nitrile hydratase activity into a cysteine protesse by a single mutation, Bio.chemistry, US, Am. Chem. Soc., Easton, PA, 34(50):16382-16388 (1995).  EDWARDS, et al., Design, Synthesis, and Kinetic Evaluation of a Unique Ciass of Elastase Inhibitors, the Papiddy & Ketobertzoxazoles, and the X-ray Crystal Structure of the Covalent Complex between Portrine Pancreatic Elastase and Ao-Ala-Pro-Val-2-Benzoxazole, Journal of American Chemical Society, vol. 114, No. 5, p 1854-1863 (1992).	Examiner Initia <b>js</b>			72
BERGEMAN, et al., Studies on the reactivity of alphaoyano.alpha-lacoyano alkanoates. Versitile synthons for the assembly of imidazolea, Helv.Chim. ACTA, 82(6):909-918 (1999).  BILLSON, et al., The Design and Synthesis of Inhibitors of the Cystelryl , Bloorg. Med. Chem. Lett. vol. 8, pp. 983-998, 1998  BROMME, et al., Potent Inactivation of Cathepoins S and L , Blol. Chem. Hoppe—Seyler. vol. 375, No. 5, pp. 343-347, 1994.  CHATTERJEE, et al., D-Amino Acid Containing, High-Affinity Inhibitors of Recombinant Human Calpain I, Journal of Medicinal Chernistry, vol. 41, No. 15, p: 2883-2866 (1998).  COHEN, et al., Therapy of relapsing multiple scienosis. Treatment approaches for nonresponders, Journal of Neuroimmunology, 98: 29-38 (1999).  DUFOUR, et al., Engineering nitrile hydratase activity into a cysteine protease by a single mutadion, Bio.chemistry, US, Am. Chem. Soc., Easton, PA, 34(50):16382-16388 (1995).  EDWARDS, et al., Design, Synthesis, and Kinetic Evaluation of a Unique Class of Elastase Inhibitors, the Pepfidy a-Ketobenzoxazoles, and the X-ray Crystal Structure of the Covalent Complex between Porcine Pancreatic Elastase and Ac-Ala-Pro-Val-2-Benzoxazole, Journal of American Chemical Society, vol. 114, No. 5, p 1854-1863 (1992).		)		
the assembly of imidazolea, Helv.Chim. ACTA, 82(6):909-918 (1999).  BILLSON, et al., The Design and Synthesis of Inhibitors of the Cystelnyl , Bloorg. Med. Chem. Lett. vol. 8, pp. 993-998, 1998  BROMME, et al., Potent Inactivation of Cathepetrs S and L , Blol. Chem. Hoppe—Seyler. vol. 375, No. 5, pp. 343-347, 1994.  CHATTERJEE, et al., D-Amino Acid Containing, High-Affinity Inhibitors of Recombinant Human Calpain I, Journal of Medicinal Chemistry, vol. 41, No. 15, p: 2883-2866 (1998).  COHEN, et al., Therapy of relapsing multiple eclerosis. Treatment approaches for nonresponders, Journal of Neuroimmunology, 98: 29-36 (1999).  DUFOUR, et al., Engineering nitrile hydratase activity into a cysteine protease by a single mutation, Blo.chemistry, US, Am. Chem. Soc., Easton, PA, 34(50):16382-16388 (1995).  EDWARDS, et al., Design, Synthesis, and Kinetic Evaluation of a Unique Class of Elastase Inhibitors, the Peptidyl a Ketoberzoxazoles, and the X-ray Crystal Structure of the Covalent Complex between Poreine Pancreatic Elastase and Ao-Ala-Pro-Val-2-Benzoxazole, Journal of American Chemical Society, vol. 114, No. 5, p 1854-1863 (1992).			ASHWORTH, et al., 4-Cyanothiazoiidides as very potent, stable inhibitors of dipeptidyl peptidase IV, Bioorganic & Med. Chem. Letters, B,Oxford, 6(22):2745-2748 (1996).	
BROMME, et al., Potent Inactivation of Cathepoins S and L., Blot. Chem. Hoppe—Seyler. vol. 375, No. 5, pp. 34S-347, 1994.  CHATTERJEE, et al., D-Amino Acid Containing, High-Affinity Inhibitors of Recombinant Human Calpain I, Journal of Medicinal Chemistry, vol. 41, No. 15, p: 2863-2866 (1998).  COHEN, et al., Therapy of relapsing multiple sciences. Treatment approaches for nonresponders, Journal of Neuroimmunology, 98: 29-38 (1999).  DUFOUR, et al., Engineering nitrile hydratase activity into a cysteine protease by a single mutation, Bio.chemistry, US, Am. Chem. Soc., Easton, PA, 34(50):16382-16388 (1985).  EDWARDS, et al., Design, Synthesis, and Kinetic Evaluation of a Unique Class of Elastase Inhibitors, the Peptidyl a-Ketobenzoxazoles, and the X-ray Crystal Structure of the Covalent Complex between Portine Pancreatic Elastase and Ao-Ala-Pro-Val-2-Benzoxazole, Journal of American Chemical Society, vol. 114, No. 5, p 1854-1863 (1992).				
CHATTERJEE, et al., D-Amino Acid Containing, High-Affinity Inhibitors of Recombinant Human Calpain I, Journal of Medicinal Chemistry, vol. 41, No. 15, p. 2663-2666 (1998).  COHEN, et al., Therapy of relapsing multiple scienosis. Treatment approaches for nonresponders, Journal of Neuroimmunology, 98: 29-38 (1999).  DUFOUR, et al., Engineering nitrile hydratase activity into a cysteine protease by a single mutation, Bio.chemietry, US, Am. Chem. Soc., Easton, PA, 34(50):16382-16388 (1995).  EDWARDS, et al., Design, Synthesis, and Kinetic Evaluation of a Unique Class of Elastase Inhibitors, the Peptidyl a-Ketobenzoxazoles, and the X-ray Crystal Structure of the Covalent Complex between Pornine Pancreatic Elastase and Ao-Ala-Pro-Val-2-Benzoxazole, Journal of American Chemical Society, vol. 114, No. 5, p 1854-1863 (1992).				
Journal of Medicinal Chemistry, vol. 41, No. 15, p. 2663-2666 (1998).  COHEN, et al., Therapy of relapsing multiple acterosis. Treatment approaches for nonresponders, Journal of Neuroimmunology, 98: 29-36 (1999).  DUFOUR, et al., Engineering nitrile hydratase activity into a cysteine protesse by a single mutation, Bio.chemietry, US, Am. Chem. Soc., Easton, PA, 34(50):16382-16388 (1995).  EDWARDS, et al., Design, Synthesis, and Kinetic Evaluation of a Unique Class of Elastase Inhibitors, the Peptidyl a-Ketobenzoxazoles, and the X-ray Crystal Structure of the Covalent Complex between Portine Pancreatic Elastase and Ao-Ala-Pro-Val-2-Benzoxazole, Journal of American Chemical Society, vol. 114, No. 5, p 1854-1863 (1992).				
Neuroimmunology, 98: 29-38 (1999).  DUFOUR, et al., Engineering nitrile hydratase activity into a cysteine protease by a single mutation, Bio.chemietry, US, Am. Chem. Soc., Easton, PA, 34(50):16382-16388 (1985).  EDWARDS, et al., Design, Synthesis, and Kinetic Evaluation of a Unique Class of Elastase inhibitors, the Peptidyl a-Ketobenzoxazoles, and the X-ray Crystal Structure of the Covalent Complex between Pornine Pancreatic Elastase and Ao-Ala-Pro-Val-2-Benzoxazole, Journal of American Chemical Society, vol. 114, No. 5, p 1854-1863 (1992).				
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Peptidyl a-Ketobenzoxazoles, and the X-ray Crystal Structure of the Covalent Complex between Pornine Pancreatic Elastase and Ao-Ala-Pro-Val-2-Benzoxazole, Journal of American Chemical Society, vol. 114, No. 5, p 1854-1863 (1992).				
EVOLI, et al., abstract only, Drugs, 1998, 52(5), 662-70			Peptidyl a-Ketobenzoxazoles, and the X-ray Crystal Structure of the Covalent Complex between Portine Pancreatic Elastase and Ao-Ala-Pro-Val-2-Benzoxazole, Journal of American Chemical Society, vol. 114, No. 5,	
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		GOUR-8ALIN, et al., Inhibition of papaln by peptide nitriles: conversion of the nitrile group into other functionalities via the papaln:nitrile thiomidate ester adduct, Can. J. of Chem, CA, National Research Council. Ottawa, 69(8):1268-1297 (1991).	
		HALLEGUA, et al., Cyclosporine for lupus membranous nephritis: experience with ten patients and review of the literature, Lupus, 9: 241-251 (2000).	
		HANZLIK, et al., Reversible covalent binding of peptide nitriles to papain, Bicohim. Biophys, Acta, vol. 1035, No. 1, 1990, pp. 62-70.	
		HARRIS, et al., Characteristics of a continuous fluorogenic assay for calpain I. Kinelic evaluation of peptide aldehydes, halomethyl ketones and )achalasia) methyl ketones as inhibitors of the enzyme, Chemical Abstracts, 110:7, Bicorg. Med. Chem. Lett. 5(4) 393-398 (1995).	
		HEITMILLER, R.F., abstract only., Samin. Thorac. Cardiovasc. Surg., 1999, 11(1), 41-8	
		KATRITZKY, et al., Benzotriazole-assisted symhesis of alpha. (acylamino) nitrites and a conceptually novel method for peptide elongation, Chem. Soc., Perkin Trans. 1(7):1853-1857 (1990).	
		KHAMASHTA, et al., Expert. Opin. Investig. Drugs, 2000, 9(7), 1581-83.	
-		KRANTZ, et al., Pepildyl (Acyloxy)methyl Ketones and the Culescent , Biochemistry. vol. 30, pp. 4878-4687, 1991	-
  ;		LEVY, E.G., Baillieres Clin. Endoorinol. Metab., 1897, 11(3) 585-595	
		LI, et al., Aminoacylpyrrolldine-2-nitrites: Potem and stable inhibitors of dipeptidyl-peptidase IV (CD 26), Archives of Biochem. and Bioph., 323(1)148-154 (1995).	
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1 Unique citation designation number. 2 Applicant is to place a check mark here if English language Translation is attached.

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		LIPSHUTZ, et al., Chiral induction in orginally recemic amino acids via 5-acyl and 5-acyloxyaminoxxazoles, lsr, J. Chem. 27(1):49-56 (1986), abstract.	
		LIPSHUTZ, et al., Heterocycles as masked dismide/dipeptide equivalents. Formation and reactions of substituted 5-(acytamino)oxazoles as intermediates en route to the cyclopeptide alkaloids, . Am. Chem. Soc., 105(28):7703-7713 (1983).	
		LIPSHUTZ, et al., Oxazolophanes as masked cyclopeptide alkaloid equivalents; cyclic peptide chemistry without peptide couplings, J. Am. Chem. Soc., 112(19):7032-7041 (1990).	
		MARCUIS, et al., Potent dipeptidylketone inhibitors of the cysteine protease cathepsin, Chemical Abstracts, 7:4 581-588 (1999).	
		MCMATH, et al., Direct dialkylation of peptide nitries. Application of the synthesis of 1-aminocyclopropane-1 carboxyllo acid (Acc)-containing dipeptides, Bull. Sec. Chim. Fr. 134(1):105-110 (1997).	
		MORIYA, et al., Synthesis and Hypolipidemic Activities of 5-Thlenyi-4-oxazoleacetic Acid Derivatives.sup.1, J. Med. Chem., 29: 333-341 (1986).	
		MOSER, et al., 130 Poly (dipertamidinium)-Salze; definition und metoden zur praparativan herstellung, poly (dipertamidinium) salts; definition and methods of preparation, Helvitica Chimica ACTA, CH, Verlag, Basal 69:1224-1262 (1986).	
		NIPPON, K., Patent Abstracts of Japan, Publication No. 63301858, 013(197)(1988), abstract	
1		NORTH, et al., Synthetic studies towards cyclic peptides. Concise synthesis of thiazoline and thiazole containing amino acids, Tetrahedron, 48(24):8627-8290 (1990).	
		OGILVIE, et al., Peptidomimetic inhibitors of the human cytomegalovirus protease, Journal of Medicinal Chemistry vol. 40 No. 25 (1997).	
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W		PICKEN, et al., Inhibition of bovine cathepsin B by amino acid-derived nitriles, Biochemical Society Transactions, vol. 18, No. 2, p.316 (1980).	
7		PLIURA, et al., Comparative behavior of colpain and cathepsin B , Biochem. J. vol. 268, pp. 759-762, 1992	
	-	POLMAN, et al., Drug treatment of multiple eclerosis , BMJ, 321: 19-28 (2000).	
		RIESE, et al., Essential Role for Cathesin S in MHC Class II-Associated Invariant Chain Processing and Peptide Loading, Immunity, 4: 357-358 (Apr. 1998).	
		SMITH, et al., New Inhibitors of Cysteine Proteinasee, J. Am. Chem. Soc. vol. 110, No. 13, pp. 4429-4431, 1985	
<del>                                     </del>		SUAVE, et al., Carboxylmodified amino acids and paptides, I An efficient method for the synthesis of monofuctionalized enamines and monofuntionalized methyl ketons derivatives form thioamides via episulfides and thioiminium salts, Tetrahadron Lett, 29:18 2295-2298 (1988).	
		SUZUE, S., Hepatic agents. I. Synthesis of aminocyl (and hydroxyacyl) aminoacetoritriles, Chem. and Pharm. Bull. (Tokyo) (1988), 16(8), 1417-32.	
		SUZUE, et al., Studies on Heptic Agents, Chem. Pharm. Bull. vol. 16, No. 8, pp. 1417-1432, Aug. 1968.	
,		SUZUKI, et al., Synthesis of 2-Aryl-4(3-thienyl)imidazole Derivatives with Antinflammatory Properties .sup.1), Chem. Pharm. Bull, 34(8): 3111-3120 (1998).	•
		TAO, et al., Inhibition of Calpain By Peptidyl Heterocycles, Bloorganic & Medicinal Chemnistry Letters, 6:24 3009-3112 (1996).	
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	THOMPSON, et al., Carboxy4-modified amino acids and peptides as protease inhibitors, J. Med. Chem., 29(1):104-111 (1986).	
71	TSUTSUMI, et al., Synthesis and Structure-Activity Relationships of Peptidyl a-Keto Heterocycles as Novel Inhibitors of Protyl Endopeptidase, Journal of Medicinal Chemistry, vol. 37, No. 21, p 3482-3502 (1894).	+
	VARGHA, E., Peptide derivatives. VI. N-protected di- and tripeptide nitriles, Stud. Univ. Babes-Bolyal, Ser. Chem., 13(2):31-5 (English abstract of article in Romanian) (1986).	+
	VARGHESE, The structure and resonance Raman spectra-structure correlations for methyloxycarbony-L-phenylalanyi-L-alanthe ethyl dithloester, Can. J. Chem., 64(6):1888-1873 (1986).	1
h	YAMADA, et al., Studies of unusual amino acids and their paptides. IX. The synthetic study of bottomycine t and B2, Bul, Chem. Soc., Jpn. 51(3):878-83 (1978), abstract.	31
	, Derwent Abstract of Japanese Patent Application 08-192199 , (Jul. 12, 1994).	
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Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231.

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	09/928,122		BREITENBUCHER, et al.	08-10-2001	<del></del>
	09/946,214		GU, et al.	09-05-2001	
	10/042,565		QUIBELL, et al.	11-18-2001	
	10/148,612	$\Gamma$	OHMOTO, et al.	08-21-2002	
	10/148,613		OHMOTO, et al.	08-28-2002	
	10/181,713		OHMOTO, et al.	07-22-2002	
	10/161,799		OHMOTO, et al.	07-23-2002	
	10/231,425		BUXTON, et al	08-28-2002	
	10/258,512		BEKKALI, et al.	09-27-2002	
	10/258,053		CUMMINGS, et al.	10-17-2002	
<u> </u>	10/275,563		COWEN, et al.	11-07-2002	
	10/279,424		BEKKALI, et al.	10-24-2002	
	10/466,385		QUIBELL, et al.	01-08-2004	
	6,015,791		GYORKOS, et al.	01-18-2000	
	6,608,057	$\Gamma$	CYWIN, et al.	08-18-2003	
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		JP	JP 2001-055366		SATO, et al.	02-27-2001		Т
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		wo	WO02/057248		QUIBELL, et al.	07-25-2002		Т
		WO	WO02/057249		QUIBELL, M	07-25-2002		Τ
		WO	WO02/057270		QUIBELL, M	07-25-2002		Т
- 1		wo	WO02/096892		OHMOTO, et al.	05-30-2002		Τ
T		WO	WC02/100849		HICKEY, et al.	12-19-2002		Τ
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	OTHER PRIOR ART NON PATENT LITERATURE DOCUMENTS	
Examiner Cite Initials No.		T
	CHAPMAN, et al., Emerging Roles for Cysteine Proteases in Human Biology, Ann. Rev. Physiol.; 1997; 59; pp.63-88.	
	DRANOFF, et al., Cathepein S Required for Normal MHC Class II Peptide Loading and Germinal Center Development, Immunity, 1899; 10; pp.197-208.	
	FENWICK, et al., Diastereoselective Synthesis, Activity and Chiral Stability of Cyclio Alkoxyketone Inhibitore of Cathepsin K., Bioorg. Med. Chemm. Lett.; 2001; 11(2); pp.199-202.	
11	FENWICK, et al., Solid-phase Synthesis of Cyclic Alkoxyketones, Inhibitors of the Cysteine Protease Cathepsin K., Bioorg. Med. Chem, Lett.; 2001; 11(2); pp.195-198.	
	GREENSPAN, et al., Identification of Dipeptidyl Nitrlies as Potent and Selective Inhibitors of cathepsin B Through Structure-based Drug Design, J. Med. Chem.; 2001; 44; pp.4524-4534.	!
	LOWE, et al., Kinetic Specificity in Papain-catalyzad Hydrolyses, Biochem. J.; 1971; 124(1); pp.107-115.	
	MACIEWICZ, et al., A comparison of Four Cathepsins (B,L,N and S) with Collagenolytic Activity From Rabbit Spleen, Biochem J.; 1998; 256; pp.433-440.	
	MARQUIS, et al., Azeanone-based Inhibitors of Human and Rat Cathepain K., J. Med. Chem.; 2000; 44(9); pp.1380-1395.	
	NAKAGAWA, et al., Imparied Invariant Chain Degradation and Antigen Presentation and Diminished Collagen-Induced Arthritis in Cathepsin S-null Mice, Immunity; 1999; 10; pp.207-217.	
13	OTTO, et al., Cysteine Proteases and their Inhibitors, Chern. Rev.; 1997; 97; pp.133-171.	
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Examiner		

1 Unique citation designation number. 2 Applicant is to place a check mark here if English language Translation is attached.

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		5HI, et al., Molecular Cloning and Expression of Human Alveolar Macrophage Cathepsin 8, an Elastinolytic Cystelna Protease, J. Blol. Chem.; 1992; 267; pp.7258-7262.						
	B		SINGH, et al., beta-	łaciame as Enzyme Inhii	oltors., IDrugs; 2000; 9(6); pp.	512-517.		
	M		VILLADANGOS, et 1998; 101(10); pp.2	al., Cathepsin 8 Activity 351-2363.	Regulates Antigen Presentation	on and Immunity, J. Clin. tovest;		
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